

**Notice of Allowability**

Application No.

10/035,039

Examiner

Khanh Tran

Applicant(s)

CLASSON ET AL.

Art Unit

2611

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Request for Continued Examination (RCE) filed on 06/09/2006.
2. ☒ The allowed claim(s) is/are 1-12, 15-34 and 36-52, which have been renumbered as set forth in the Office action.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

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1. The Request for Continued Examination (RCE) filed on 06/09/2006 has been entered. Claims 1-12, 15-34 and 36-52 are pending in this Office action.

2. Claims have been renumbered as shown below, respectively:

claim 15 renumbered as claim 13;

claims 39-44 renumbered as claims 14-19;

claims 16-19 renumbered as claims 20-23;

claims 20-34 renumbered as claims 24-38;

claim 45 renumbered as claim 39;

claims 36-38 renumbered as claims 40-42; and

claims 46-52 renumbered as claims 43-49;

### **EXAMINER'S AMENDMENT**

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

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Regarding claim 43, in line 2, "TDD" has been changed to -- Time Division Duplex (TDD) --.

### ***Response to Arguments***

4. Applicant's arguments, see pages 15-23 in Applicants' Remarks, filed on 06/09/2006, with respect to claims 1-12, 15-34 and 36-38 have been fully considered and are persuasive. The rejection of claims 1-12, 15-34 and 36-38 has been withdrawn.

### ***Reasons for Allowance***

The following is an examiner's statement of reasons for allowance:

5. Regarding claim 1, claim 1 is allowable over prior art of record because the cited references (US 6,289,217 B1 and US Patent Application Publication No. US2003/0086371 A1) taken individually or in combination cannot teach or suggest the uniquely added distinct features "receiving a first channel quality report comprising an overall channel quality indicator, selecting a set of subcarriers for transmission, and selecting a modulation and coding scheme for the selected set of subcarriers based on the overall channel quality indicator" and "receiving a second channel quality report comprising at least one subband channel quality indicator, selecting the set of subcarriers within at least one subband for transmission based on the at least one subband channel quality indicator, and selecting a modulation and coding scheme for at

least one of the at least one subband selected for transmission based on a corresponding at least one subband channel quality indicator”.

6. Regarding claim 16, claim 16 is allowable over prior art of record because the cited references (US 6,289,217 B1 and US Patent Application Publication No. US2003/0086371 A1) taken individually or in combination cannot teach or suggest the uniquely added distinct features “selecting a first modulation and coding scheme based upon an overall average channel quality indicator for a plurality of communications signal carriers to use when transmitting at least part of the data to a first given transmission target” and “using at least a channel quality indicator information for at least some individual carriers to select a second modulation and coding scheme to use when transmitting at least part of the data to a second given transmission target, the second modulation and coding scheme being selected from amongst a plurality of candidate modulation and coding schemes”.

7. Regarding claim 20, claim 20 is allowable over prior art of record because the cited references (US 6,289,217 B1 and US Patent Application Publication No. US2003/0086371 A1) taken individually or in combination cannot teach or suggest the uniquely distinct features “when channel quality data is obtained, using the channel quality data to determine at least whether, how, and when to transmit at least a portion of the data pursuant to a second transmission selection mode, wherein using the channel quality data to determine whether, how, and when to transmit at least a portion

of the data pursuant to a second transmission selection mode includes selecting a first modulation and coding scheme for use with a first carrier and a second modulation and coding scheme for use with a second carrier to transmit at least a portion of the data".

8. Regarding claim 25, claim 25 is allowable over prior art of record because the cited references (US 6,289,217 B1 and US Patent Application Publication No. US2003/0086371 A1) taken individually or in combination cannot teach or suggest the uniquely added distinct features "selecting a first modulation and coding scheme based upon an overall average channel quality indicator for a plurality of communications signal carriers to use when transmitting at least part of the data to the at least one transmission target" and "using at least a channel quality indicator information for at least some individual carriers to select a second modulation and coding scheme to use when transmitting at least part of the data to the at least one transmission target, the second modulation and coding scheme being selected from amongst a plurality of candidate modulation and coding schemes" and "wherein selecting a first modulation and coding scheme and using at least a channel quality indicator information for at least some individual carriers to select a second modulation and coding scheme".

9. Regarding claim 28, claim 28 is allowable over prior art of record because the cited references (US 6,289,217 B1 and US Patent Application Publication No. US2003/0086371 A1) taken individually or in combination cannot teach or suggest the uniquely distinct features "when likely trustworthy channel quality is not obtainable for a

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first given transmission target, selecting a first modulation and coding scheme based upon overall average channel quality indicator for the plurality of communications signal carriers to use when transmitting at least part of the data to the first given transmission target" and "when likely trustworthy channel quality is obtainable for a second given transmission target, accessing at least channel quality data that includes channel quality indicator information for at least some individual carriers of the multi-carrier communication system" and "using at least the channel quality indicator information for at least some individual carriers to select a second modulation and coding scheme to use when transmitting at least part of the data to the second given transmission target".

10. Regarding claim 30, claim 30 is allowable over prior art of record because the cited references (US 6,289,217 B1 and US Patent Application Publication No. US2003/0086371 A1) taken individually or in combination cannot teach or suggest the uniquely added distinct features "selecting a first modulation and coding scheme based upon an overall average channel quality indicator for a plurality of communications signal carriers to use when transmitting at least part of the first data to the first transmission target" and "using at least a channel quality indicator information for at least some individual carriers to select a second modulation and coding scheme to use when transmitting at least part of the second data to the second transmission target".

11. Regarding claim 45, claim 45 is allowable over prior art of record because the cited references (US 6,289,217 B1 and US Patent Application Publication No.

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US2003/0086371 A1) taken individually or in combination cannot teach or suggest the uniquely added distinct features "determining an identification of the mobile communications unit into one of a first type and a second type based on the coherence time attribute" and "transmitting a message indicating the classification made by the mobile communications unit" and "in response to the identification being into the first type, determining a band-average channel quality for an overall bandwidth of a multicarrier communication channel, and transmitting the band-average channel quality; and in response to the identification being into the second type, determining a channel quality for at least one subband within the multicarrier communication channel, wherein a subband comprises at least one subcarrier, transmitting the channel quality for the at least one subband, and transmitting a corresponding subband index for the at least one subband".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Conclusion**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Tran whose telephone number is 571-272-

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3007. The examiner can normally be reached on Monday - Friday from 08:00 AM - 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KCT

*Khanh Cong Tran*

06/23/2006

Primary Examiner

KHANH TRAN